Innovation First Victor 883 Red/Blue

December 1999 **Data Sheet**

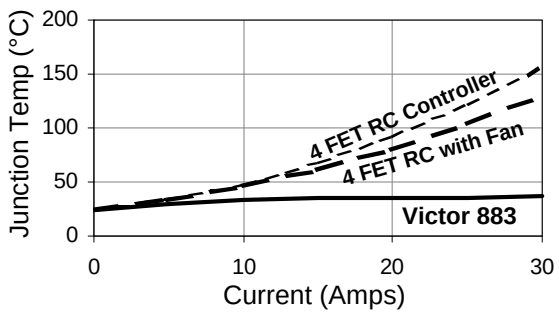
General Description:

The Victor 883 is a speed controller specifically engineered for robotic applications. The high current capacity, low voltage drop, and peak surge capacity make the Victor 883 ideal for drive systems while its braking options and precise control meet the demanding needs of arms and lift systems. Innovative FET switching architecture and an integral cooling fan ensures cool FET junction temperatures. The low voltage drop and high switching speed ensures the motor receives maximum power, providing significant improvements in acceleration, direction changes, and lifting torque.

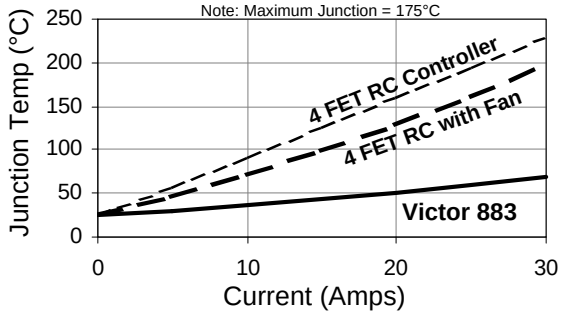
Features:

- 12 low Rds(on) FETs, 6 forward and 6 reverse
- extremely fast FET rise/fall time
- brake or coast option (used while in neutral)
- simplified calibration procedure
- pre-calibrated for the FIRST control system
- identifies absence of PWM input
- integral fan to provide optimized cooling
- sturdy high current screw terminal connections
- high visibility LED
- rugged construction
- two mounting hole for secure installations

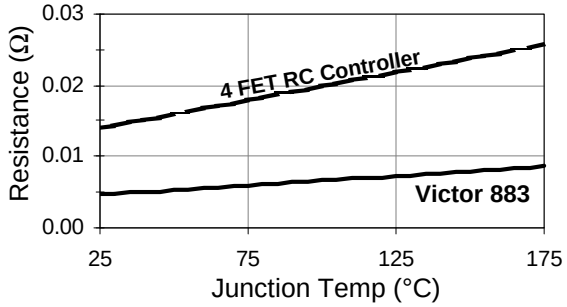
Junction Temp Vs. Current at Full Throttle



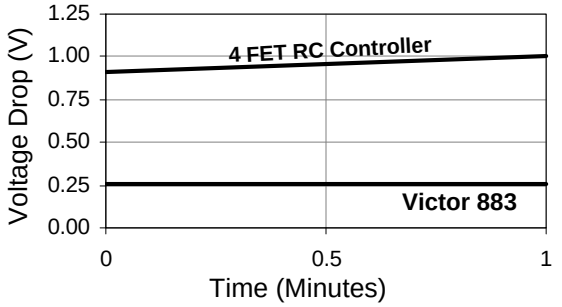
Junction Temp Vs. Current at Low Throttle

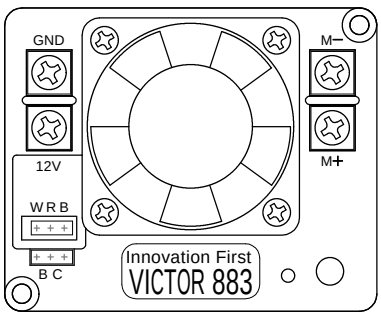


FET On-Resistance Vs. Temperature



Voltage Drop Vs. Run Time





Parameter	Conditions	Min	Typ	Max	Units
DC Input Voltage		7	12	15	V
Forward On-Resistance	Measured at 30A		.0094		Ω
Reverse On-Resistance	Measured at 30A		.0094		Ω
3 FET On-Resistance	Use for comparison	.0023		.0032	Ω
Switching Frequency			2000		Hz
Recommended for Continuous Use				58	A
Current, Low Throttle	FET Thermal Limit			105	A
Current, Full Throttle	FET Thermal Limit			420	A
Current, Continuos	Electrical Limit			348	A
Current, Pulse	<300 μS			1200	A